Building 126

Historical Use

There is a total of 12,500 sq. ft. Building 126 was built in 2001. This facility is a single story office building.

Current Use

Building 126 was constructed by the tenant in support of the Nuclear Energy mission at Mound. The building currently serves as office space for this tenant.

Description

The structure is steel frame, with brick facing, wood joist roof with a steel roof deck. The building has a central station air handler with hot water from the Boiler Building, Building 128. Cooling is direct expansion. Individual zone control is via VAV boxes with electrical reheat.

Safety/Hazards/Authorizations Basis

Building 128

Historical Use

There is a total of 900 sq. ft. Building 128 was built in 2001. This facility is a single story boiler building .

Current Use

Building 128 which was constructed in 2001 in support of the Nuclear Energy mission at Mound .This boiler building currently provides hot water to Buildings 50, 36, 37, and 126.

Description

The facility is a concrete block building with a concrete slab on-grade. Within the building are two 100 HP hot water boilers and a duplex primary/secondary pumping system.

Safety/Hazards/Authorizations Basis

There is no known radiological contamination or other hazards in this building. It has been consistently used for office/industrial use.

Building 45

Historical Use: **This is the Radiological Calibration Facility, which was originally constructed in 1968. It was designed to be used for neutron measurements.**

The current use is the same as the historical use, and is currently occupied/operated by the site contractor and one DOE Facility Rep. Personnel in this facility are responsible for the calibration and functional inspection of portable instruments, fixed monitors, alarm systems, and other instruments used in the measuring and detection of radiological isotopes.

Description

- **There is an original single-story concrete block structure. It has a low scatter room, tritium calibration hood (which is operable but not yet in use) and other state-of-the-art calibration facilities.**

- **The original building structure was constructed in 1968. The first addition was built in 1988. The original building and first addition consist of a single story concrete structure with a penthouse for housing mechanical equipment.**

- **The second addition, totaling approximately 6,800 square feet, was completed in 1995, and consists of a two-story structure on the southern side of the original building and a one-story structure on the northern side of the original building. The additions have masonry load-bearing walls. The current size of entire building is 9,582 sq. ft.**

The building was designed to support a capacity of up to 6000 instruments, calibrated twice a year; however, the current workload is approximately 1,400 instruments calibrated only once per year. Additionally, the facility was designed to calibrate 40,000 TLDs a year, but current workload is approximately 40 per year . Capabilities in the building include:

1. **A low scatter calibration area – Note: This area was previously used but is not now in use.**
2. **Instrument calibration wells**
3. **An X-Ray facility. Note: This area was previously used but is not now in use.**
4. **A complete tritium gas rack. This area is not yet in use.**

We will not be entering the penthouses, which contain the standard types of utilities support equipment you would expect for a building of this size.

<u>Room by Room</u>

The building consists of a variety of types of rooms, which I will explain as I go:

First is the instrument acceptance office. *(Walk down hallway)*

(Room 117) On the right, you can see an area where the technician's perform repair and benchtop calibrations.

Room 105 - is a parts room.

Go down hall

Room 114 The equipment room has an Uninterruptible Power Supply, which can run 70 minutes on a full load.

Room 106 Was originally called the X-ray room. The room has walls and a door that are lined with lead (so Superman cannot see through it). It was previously used as an x-ray room, but it is now used for storage and as an area to perform air-flow calibration for portable air sampling units.

Room 109 houses a control panel for the X-ray room which is not in use at this time as an X-ray room. It has the control panel for the Wells room. It also currently allows for camera surveillance of the roof area of the building for operational safety purposes.

Room 108 is the Wells room. The wells are 30' down below the operator's chairs, and rise up towards the roof and back down again for calibration purposes. There is a round platform at the bottom of each well with source material on it (Gamma source – Cesium, or Neutron source of Californium).

Room 110 and 110a are used for instrument contamination inspection.

Room 122 is the Operations Room/controls for the basement. This operations panel has been used in the past but is not currently operational.

Room 001 is a low scatter room with cobalt source material in a container beneath the floor's surface. Again, this calibration function was set up but not used.

Room 121 is above the basement (Room 001). It is a temporary source storage location (*point to white tube/containers sticking out of floor).* The tube you see running up the middle of the room was a high volume, low pressure air calibrator. It is not currently in use. There are moveable stanchions set up for independent operations. There are also 4 cameras in the room, a safety air lock system, and a standard rotating beacon and klaxon safety system. This room was designed to handle neutrons.

Room 007 – Downstairs is a shielded vault. All of the calibration standards for nongamma neutron sources were stored here and it was originally designed for dosimetry.

Safety/Hazards/Authorization Basis

This building is a radiological building with an approved ASA.

Miscellaneous (*At end of tour)*

This building will eventually be transitioned to MMCIC. Before transition, it is possible that an outsourcing effort will be investigated in an effort to keep the calibrations functions available for on-site equipment. The major challenge to this approach will be the requirement for the intended operator to have an NRC license with which to handle the source material. There would also be the issue of DOE overcoming some of the federal property management rules which might prevent us being able to transfer the very unique equipment to a third party.

Building 61

Historical Use

There is a total of 12,500 sq. ft. Building 61 was built in 1980, as a central shipping, receiving, and warehouse facility. No research, development, or production activities using radioactive or energetic materials have occurred in the building.

Current Use

Building 61 continues to serve as warehouse, with some office space on the first and second floors. Please note that per the RFP, these functions will likely be moved offsite by the time the contract is awarded. The facility will likely contain some residual personal property (some of which may need excessed and some of which could be left in place with the lease or transfer of the buildings), but the facility will not occupied or otherwise in use.

Safety/Hazards/Authorizations Basis

At various times, contaminated equipment, such as property being excessed, has passed through this building, but those incidences were remediated at the times. No further clean-up actions are anticipated.

Description (*Outside of building)*

The facility is a reinforced concrete structure with a concrete floor on grade and a metal roof. It has a split level design. One-half of the building has offices, the other half contains high, open bays for materials handling. A bulk nitrogen storage tank is immediately outside this facility.

(*Go into main door)*

As you can see (straight ahead), this is the general shipping and receiving staging area.

(*Go to right)*

Here you see the staging area for those items being auctioned. Auction is one way in which we dispose of our excess personal property.

(*Go down aisle between shelves)*

Aisles H through L are staging areas for donation items. Some personal property can be donated to schools and other nonprofit organizations.

(*If gate is open, go into large area storage – otherwise, go back out and down staging area aisle)*

There is a small, locked area for high value or sensitive items. These can be staged here or checked out for use by projects.

(Go down far aisle)

This area contains small offices, a break room, and the latrines.

(Go back to entrance and up the stairs)

(End at main Mound Road entrance)

The second floor contains office space and conference rooms.
We will now go back out to where we came in and take the bus up to SM/PP Hill, to buildings 126 and 128.

OSE Building

Intro to Group before Tour

The building has a total of 90,072 sq. ft., and was built in 1987.

The building currently houses offices for the Department of Energy and the site contractor. It includes an auditorium, a graphics services area, and the site's main computer and telecommunications facility. The building has been used for the same purposes since its construction.

As stated in Exhibit 2 of the RFP, OSE is a steel frame, four-story structure and penthouse, with a brick facing and built-up membrane roof. The building has central steam and chilled water for heating and air conditioning. Electric service is 480V.

1st floor: *(Start in lobby)*

This is the lobby area. It has a guard station, which is no longer in use, and two bathrooms.

(Walk into cafeteria)

This area was previously used as the site cafeteria. It is now used for training and small conferences. There are offices on the north side which have been used for such things as storage of employee transition materials and the FOIA Reading Room. What was once the kitchen on the other side of these doors has been converted into a records storage area, including legacy x-rays, and the site's print shop.

(If possible, go into Records Area and Print Shop)

(Exit cafeteria – go through main doors into hallway)

As you can see, this building is serviced by two elevators. Each floor of the building also has both a men's and lady's restroom. At the end of the hall is an exit, and also an entrance to the Medical facilities. The medical facilities will be toured as part of the D&D buildings.

(*Go up the stairs)*

2nd floor: **The second floor consists primarily of offices, with some storage areas and 3 conference rooms. Down the hall and on your left is the auditorium, where you were yesterday during our initial presentation.**

(Go down halls around BWXTO Site Transition and Procurement Offices, then up aisle towards video-teleconference room)

There is a video-teleconference room which is serviced by an ISDN line and polycom video equipment. There is a steerable satallite dish on the roof of OSE, which is often used to receive dedicated signals, such as training classes broadcast from various sources. This room is frequently used by DOE in lieu of travel for activities including training, conferences, and presentations.

(*Go into auditorium)*

This auditorium seats approximately 150, and has its own sound system control room. The stage has a "back-door" entrance from the south hallway.

(Exit auditorium from stage, go first to back of stage, then up back hallway to BWXTO Public Affairs)

This is where the site contractor currently houses its Graphics area for its Public Affairs activities. It consists primarily of office and storage space.

(*Exit Graphics area)*

3rd floor: **The third floor consists solely of offices and conference rooms used by DOE Ohio Field Office and some of its support service contractors. Functions performed here include the Office of Compliance and Support, The offices of the Chief Financial Officer, Human Resources, and Procurement.**

(*Go first through OCS, through main aisle between CFO, and then point to HR on left. Exit up through AAM's spaces and back up main hall to stairs)*

4th floor: (*At entrance to 4th floor)*

The 4th floor houses more of the DOE Ohio Field Office's functions, including the office of the Manager, Legal Counsel, Public Affairs, and Diversity.

(*Walk in circle first past Legal, to Manager's area, down back hallway, then back up to Conference Room)*

This is the Manager's conference room.

(Walk out to main hall, point towards Computer Room)

The computer room serves as the Data Network Center for the entire facility. All connections run through here. There is an Enterprise switch and fiber and copper connections. The room also contains the bank of all servers for the site, including Novell file servers, Plant email servers (the site contractor is on Groupwise, while DOE uses Outlook), and all windows NT Client Server Applications, including timecards, payroll, finance, facilities maintenance, and the Mound Env'l Safety and Health (or MESH) system . There are interior and exterior web servers, providing connectivity to the internet, and cyber security systems, as well as a firewall.

(*Stand in main hall)*

There is a penthouse for OSE which houses utilities equipment and is similar to OSW penthouse. We will not be touring the penthouse here, but we will see the penthouse at OSW.

There is no known radiological contamination or other hazards in this building. It has been consistently used for office/industrial use.

As stated in the RFP, demolition of A-Building could have significant impact on this facility, since some floors open to A building and others have walls which abut the building.

This concludes the tour of Building OSE. We will now proceed with OSW Building. To do this, we will walk through A Building.

(*Walk them back down stairs to first floor and through A Building)*

OSW Building

Intro to Group before Tour, standing in front of elevators

This building was built in 1975. There is a total of 54,280 sq. ft.

The building currently has offices for the Department of Energy and the site contractor. It houses computer-aided design (CAD) products, process, drawing control program management and administrative offices, and the DOE-MEMP's project office. The building has been used as an administrative support facility since its construction.

OSW is a four-story building reinforced concrete building with masonry and brick curtain wall with a penthouse and a relatively new built-up membrane (coal tar) roof (it was replaced approximately 3 years ago.). Each floor has a men's and women's restroom, all of which have automatic mechanisms for faucets and toilets. The building is serviced by two elevators.

Safety/Hazards/Authorizations Basis

There is no known radiological contamination or other hazards in this building. It has been consistently used for office/industrial use.

As mentioned in the RFP, demolition of A-Building could have significant impact on this facility since the floors open one to another (on floors 1-3) and the walls abut one another otherwise.

Floor-by-Floor

1st floor: **The first floor is primarily offices, with some space used for storage. It is currently used by the site contractor.**

(*Walk through floor)*

2nd floor: **The second floor houses the DOE-MEMP offices. It has one large and one small conference room.**

(Walk through floor)

3rd floor: (*At floor entrance, walking into main aisle and pointing to right)*

The third floor is primarily office space for the CAD operators and Soils group.

(Walk straight ahead)

There are two rooms used for training and conferences, including one that is currently used for computer-based Rad Worker II training.

(Walk to end of aisle and turn left, into Document Control section).

There is also office space used by the site contractor's Document Control center. Storage space holds many of the site's technical manuals, and one room houses the large copier used by Document Control, a Xerox 3080.

(*Exit floor)*

4th floor: *(At entrance)*

The fourth floor contains office and storage space, as well as two conference rooms and a kitchenette.

Penthouse: (*At entrance)*

Heating and air conditioning services have been decentralized with standalone boilers and air conditioning systems. A natural gas line has been installed from the Powerhouse. Electric service is 480V.

(*Walking in, first to left, then counter clockwise through room)*

The penthouse contains a chiller, a pump, and two air handlers. To the left is an elevator room and a compressed air tank that is used for actuators.

The condensing units for the chiller are on the roof.

(*Continue walking)*

There are two boilers that are natural gas fired with pumps. There is a small hot water heater for domestic water used in the bathrooms.

Air Handler #2 is used exclusively for the CAD area on the 3rd floor.

The Andover HVAC Controls 256-M units are remote programmable from W building, and constitute the Direct Digital Control (DDC) system.

(*Exit floor)*

We will now go back downstairs and out to the bus, where we will go on to building 45, then 61, then 126 and 128.